



Key Concept
Remember: Time is Money

CHAPTER THREE

Working through Design, Review, and Approval

The most difficult part of many joint projects is often the design process. Local jurisdictions are frequently focused on the project elements that fundamentally contribute to a sense of place and overall livability in their communities. WSDOT, on the other hand, may be focused on the setting of appropriate traffic speeds to accommodate traffic flow, as well as maximum vehicle and passenger safety levels. Sometimes it is difficult to compromise in these areas and design a project that can accommodate multiple needs.

With effective teamwork and a true commitment to accountability, however, it can be done.

If you've been using the recommended practices in this *Guidebook*, then collaboration has already been initiated through the development of a joint project team and a unified vision for the project. It is during project design that the need for compromise is most apparent.

All of the project's stakeholders need to be ready to LISTEN to each other's concerns and to ACCOMMODATE, wherever possible, those concerns and priorities.

There are many types of joint partnership projects.

Each type of project will have its own complexities due to the type of facility, agency partnerships, and funding sources. The **Project Type Table** in Chapter 7 presents the array of project partnership types, ranging from interstate to rural state highway projects. For each project there will be a specific path to follow for design and environmental documentation and approvals. The matrix also indicates briefly the process for each project type, but this process may have



photo Tina Cohen, DCTED

“Well-intentioned individuals without the skills or training to conduct effective public involvement will doom the effort and increase public frustration.”

— Ted Matley,
Effective Public Involvement in Transportation

a number of variations and should be clearly outlined in the beginning of the project.

The WSDOT *Design Manual* has traditionally and necessarily been written to provide maximum safety and mobility on major freeways and national highways. Although the standards in this *Manual* were initially focused on safety and mobility issues, it is undergoing an evolution process. WSDOT is expanding the *Manual* to better address community and urban arterial type

Table 2. Trade-Offs for Consideration

Slower speeds – using traffic calming techniques to reduce severity of collisions.	Less efficient movement of traffic/increased congestion/increased variability in vehicles speed.
Lower speed limits – to encourage motorists to stop and shop; allow people to safely cross streets.	Fewer speed limits that reflect current operating speeds. Reduced enforceability and compliance.
Bulb-outs at intersections – to make pedestrians more visible to motorists and delineate parking; raised medians to reduce collision points, manage access and provide refuge for crossing pedestrians	Less consistent facility; less consistency with design requirements; more obstructions on highways; increased liability; increased maintenance work; less efficient freight movement.
Roundabouts – to reduce delay, improve capacity and reduce maintenance cost.	Inconsistent facilities; safety and mobility may be compromised; reduced emergency service speed; reduced service to pedestrians and bicyclists.
Landscaping and aesthetic improvements – to visually enhance community.	Increased maintenance costs and worker exposure to traffic; reduced safety to motorists; less visibility of pedestrians.
Roadside trees – to absorb storm water runoff; add shading and visual value to community.	Reduced safety clear zone (speed dependent) or protection; increased severity of accidents. Increased environmental related accidents.
More crosswalks – to indicate pedestrian crossing areas to motorists and channelize pedestrians.	Increased pedestrian “false sense of security.”

needs. The *Design Manual* provides guidance for all state highways, but WSDOT does allow alternate designs. These deviations from standards are acceptable if an analysis of accident history or potential, usage, function, benefit/cost, and other engineering evaluation supports the proposal.

An assortment of tools is available that has been developed in collaboration with the Association of General Contractors (AGC) and the American Public Works Association (APWA) to provide the best method of building a project such as the *Plans Preparation Manual*, *Standard Specifications* and the *Standard Plans Manual*. Contact

your local programs engineer for more information.

New guidelines are just one piece of the puzzle. Collaborative design to achieve the multiple objectives of safety, mobility, environmental protection, and livability requires a different mindset on the part of all project team members. If you find yourself on a project team that is managing a project with these kinds of multiple objectives you need to be prepared to:

► **Think outside of your accustomed area of expertise.** If you are primarily concerned with engineering factors and functionality, you need to appreciate the benefits of a broader design context.

If you are a designer, you need to willingly and openly use the flexibility necessary to achieve a balanced outcome of technical functionality, environment, and aesthetics. And if you are primarily concerned with planning, landscape architecture, or the environment you need to respect the legitimate constraints

“Getting the right people to the table can be tough, but getting them to stay can be tougher.”

— Ted Matley,
Effective Public Involvement in Transportation

of safety, mobility, and legal liability issues of the design engineers on your team.

- **Participate in an open, iterative process.** Joint projects don't often proceed along clean, linear lines. Designs may need to change based on the emerging interests of the community, as well as changing national and state policies. New information, opportunities, and constraints may dictate a different set of project parameters. Political realities may cloud the best of design intentions. In other words, joint projects can be complicated. It's important that you enter into one of these projects understanding that **you will need patience, the ability to actively and openly listen, and the ability to change gears if needed.**

Strategies for Success

In addition to these broad guidelines, there are a number of specific techniques your team can use to negotiate successfully through the design and approval process.

- **Articulate broad interests and use the full team to help you get there.** WSDOT can be a better partner to local communities if the conversation begins with: "This is what we want to achieve" rather than "this is what we want to do." A conversation that begins with "we want to plant street trees" is not likely to be as productive as "we want to achieve traffic calming and a greener environment in our downtown core." A WSDOT example might be: "we want to achieve traffic flow that will improve driver safety." Starting with the broadest possible visions (which you developed during your early team meetings) can be helpful in using all of your team members to contribute ideas for achieving a unified vision.
- **Pull apart difficult problems and deal with them individually.** Given the complexity of joint projects, differences of opinion on a myriad of design issues can often seem overwhelming. Remember that as a team you anticipated possible barriers and hurdles right at the outset of the project, so when obstacles do come up they should not be a total surprise. On the other hand, it can be extremely difficult to ac-

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Commit to
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tually achieve design solutions that meet the needs of all parties. Rather than deal with all of your differences in one big bundle, it's important to separate them into manageable design segments, pull them apart, and work through them one by one. If necessary, bring back the experts who assisted with the early project discussions. These individuals might provide just enough outside neutral perspective to help you untie the knot in your design disagreement.

- **Be willing to negotiate trade-offs.** The most difficult role to play on the project team, if the



photo Janice Flagan,
Skagit County Public Works

▲ A steel-backed timber guardrail.

photo Bill Samblis



▲ The Larry Scott Memorial trail along SR 20 in Jefferson County is one example of a partnership project.

project is on a state facility, is undoubtedly the WSDOT Region or Headquarters engineer who must ultimately work through and approve the project's design. On the one hand, there is a need to respect the role of design requirements in the development of a project. On the other hand, there is a need to balance application of these requirements with other project elements which may necessitate deviations from the *Design Manual*. It is not an easy task.

As more experience is gained in community partnership projects, it has become clear that design engineers on these projects have found the need to operate with more flexibility than they have in the past. They also need to be able to use their best professional judgment to weigh the trade-offs inherent in urban planning and design. Where possible, design engineers need to apply a "reasonableness" standard that ensures safety and mobility and, at the same time, accomplishes the goals of the local community.

The ability to walk this fine line comes only through experience, education, and changing organizational cultures at both WSDOT and other vested partners. If you are new to this kind of work, take the time to acquire information about projects where these trade-offs have been necessary and learn from your peers who have successfully negotiated through these kinds of projects. You can get a start on this by reading the case studies that are included in this *Guidebook* in Chapter Six.

Finally, as project team members—and the primary project advocates—you need to ask yourselves (or self) if you are operating within the strict bounds of your culture, limiting yourselves (or self) to "going by the book" rather than "thinking outside of the box" and being open to changes, new ideas, and creative partnerships. Cultural change has to be supported by each organization involved, but it also happens one person and one project at a time.

► **Make certain you are achieving the document quality necessary for successful review.** Team members need to work together closely to ensure that the expectations for document quality are clearly communicated. Training programs on document expectations for various functions are offered by WSDOT. These expectations are clearly articulated in various documents including the *Environmental Procedures Manual*, which is updated and published by WSDOT on an annual basis.

An excellent tool is a filled out example of an Environmental Classification Summary (ECS), which was developed by FHWA and WSDOT for local agencies. The full form is on page 71 in Chapter 7: Tools and Resources. **Providing quality documentation the first time prevents having to redo or resubmit documents.** This example is intended to illustrate appropriate information for compliance with the various state and federal environmental regulations.

This example ECS is for a fictitious project, with responses illustrating the worst case scenario in most instances. More or less detail may be required for a specific project, depending on the nature of the work and location. Individual WSDOT Regions have also developed a variety of checklists and review tools to assist with project documentation. Work closely with the Local Programs Engineer and project engineer to use all of the available aids to prepare thorough and high-quality documentation and designs. WSDOT staff will assist other agency staff to identify the required review forms and checklists.

Figure 11. Example of a Completed Environmental Classification Summary Form

Again, **clear communication is the primary factor for success related to document quality.** If you are serving on the team as a WSDOT representative, you need to articulate to the local agency what you are looking for in terms of submittal documents. Then, if they do not meet your expectations, you need to be prepared to convey specifically what it is about the document that needs to be changed before the submittal will be approved. The WSDOT project manager should review the requested changes to understand if there is a conflict with the requested design guideline or design change and the project goals, objectives, and constraints. Inconsistencies should be resolved with the project team and communicated to the reviewer by the WSDOT project manager before the next review.

Clarity on expectations, strong communication, and a high level of document quality can go a long way toward alleviating project delays, frustration, and cost overruns.

All local projects have finite budgets—and these budgets can be stretched to the breaking point when there are delays related to design review and approval.

- **Make a commitment to prompt review and response.** All projects have finite budgets, and these budgets can be stretched to the breaking point when there are delays related to design review and approval. As a team member, it is your job to ensure that WSDOT and local agencies review projects in a timeframe that allows the project to be completed within the specified funding allowed. All members of the team should understand when and how this review will take place and be willing to live by this process. And if there are going to be delays, the reasons and timeframe for those delays should be clearly communicated.

- **Maintain documentation of all decisions and agreements made along the way.** At some point the project could move to another area within WSDOT or within the local agency that has not yet had any connection with the project. Such is the case when the project approval process leaves the regional WSDOT office and is transferred to the WSDOT Headquarters or transferred from a planning office to a design or traffic office. Design concepts or decisions can be undone then if the approval authority is not aware of the rationale for decision making up to this point. To avoid this, bring all players into the process early. This is also an area in which the project advocate or team leader should be taking a strong role. The “Project Decision Guidelines” that you developed earlier as a team should also accompany your project as it leaves the Region level and travels to Olympia or is used to update local agency staff or elected officials as personnel changes occur.



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It is the team leader's job to ensure that the project, its associated teamwork, and all related decisions are clearly communicated throughout WSDOT or the local agency, including city councils or governing decision makers.

Major Milestones in the Design Process

When the design team has been assembled for the project, there should be a meeting of the project and agency representatives to summarize the project goals, schedule, the project guidelines to be used, prior project commitments, a summary of the process to get to an approved Channelization/Intersection Plan for Approval (including deviations), and the conflict resolution process. The culmination of this work is the 30 percent design level. Updates on schedule and scope changes should be communicated, including project schedules and scope, changes in agency standards, and any changes in the areas outlined in the project initiation meeting. Consistent and regular communication is essential for success of the project. On lengthy projects, this is especially essential because of the changes in personnel, design guidelines, and policies that occur over time.

Projects on state highways are required to submit either an "Intersection Plan for Approval", or a "Channelization Plan for Approval" at the 30 percent design level. Overall instruction on WSDOT's design documentation, approval, and process review is described in Chapter 330 of WSDOT's *Design Manual*, although the submittal and review process may vary by Region. The WSDOT representative on the project management team should attach the Project Decision Guidelines (sample located in Chapter One) with the Intersection Plan. The WSDOT project advocate should brief reviewers. This will

allow potential deviations resulting from project constraints to be known by reviewers. The team communication concepts presented should smooth the way for this process. It will be up to the WSDOT project advocate (or project office) to manage the interaction between the project team and the WSDOT reviewers.

As with all major milestones for project approval there are delays that could be caused by any or all agencies or organizations during the process. The delays occur for a variety of reasons, in addition to the delay caused by competing objectives that influence the design.

Delays could be caused by things such as inconsistent, multiple layers of, or incomplete reviews and/or poor quality of document submittals creating the need for rework and resubmission.

Ultimately the goal is that all parties involved in the review process are provided the means to succeed and uphold their individual responsibilities for completing accurate and timely work.

If You Reach an Impasse: The Route to Dispute Resolution

If you've done a good job of setting up your team and if you have clearly communicated and worked collaboratively throughout the project, you should be able to avoid the kinds of disputes that ultimately cause a breakdown in the project. Sometimes, however, it's simply impossible to avoid a complete breakdown in project communication, and the team finds itself at an impasse.

If this has become the case on your project, recognize it for what it is and take steps to rectify the situation immediately. The most important first step is to bring in a neutral mediator or facilitator to help you work through the differences. This is a time when you absolutely do need outside assistance; team members cannot do this on their own. Once on board, a professional mediator will take a series of prescribed steps to begin to resolve the dispute. This involves interviewing all team members to fully understand the dispute, identifying mutual interests rather than positions, reconfirming the project goals, and creating a plan of action for working through and resolving each disputed issue. Again, if it appears that your team is breaking down to the point where it simply can't agree on how to move the project forward, it is important to hire this outside assistance right away rather than continue to plug along in an ineffective—and ultimately destructive and costly—manner.



▲ This scene from a local street in downtown Leavenworth shows the valuable contribution a well-designed street can make to a community.

“Streets have a vital function to provide access and mobility for people and goods. Streets also shape a community and influence the quality of life in a city.”

— *Making the Streets Work*,
City of Seattle, 1996

Need More Help?

Conflict Resolution and Interpersonal Skills

WSDOT's Technology Transfer Center (T2) offers classes for both local agency and WSDOT staff such as *Communication Skills, Conflict Management, Serving Difficult Clients, Understanding & Strengthening Relationships, Communication Skills for Supervisors & Lead Workers, Leadership Skills That Work*, and *Facilitator Skills Training*. Contact the T2 Training Center at 360.705.7355 or website: www.wsdot.wa.gov/TA/T2Center/Train2.htm.

For WSDOT staff, and depending on availability, local agency staff, a number of facilitation, mediation, conflict management, team building, and communication skills courses are offered either through **WSDOT's Staff Development** or **Washington State Department of Personnel (DOP)** 360.705.7060 or website: www.wsdot.wa.gov/personel/staffdev/default.htm.

Managing Public Disputes by Susan Carpenter is an excellent resource, not only for team disputes but also for broader conflicts within the community.

Master Change, Moving from Resistance to Commitment by Eric Allenburt would be helpful as well.

Products Available on Building Communities

- **A Policy on Geometric Design of Highways and Streets, 2001**, Fourth Edition, American Association of State Highway and Transportation Officials (AASHTO).
- **DesViz** is a division of WSDOT's Computer Aided Engineering Support Team. It was created for the purpose of public involvement. The staff handle everything from simple posters and flyers to video productions and 3D animations. This is an excellent resource for visualizing how your project could look when completed. 360.407.0888. www.wsdot.wa.gov/eesc/cae/DesignVisualization/desviz.htm.
- **Developing Your Center: A Step-by-Step Approach** is an excellent product for local government officials, private developers, transit agency representatives, and citizens. It was created with the intent of helping partnering groups and citizens organize around a clear vision, strong partnerships, and a solid plan of action to shape their communities. Copies can be obtained from the Puget Sound Regional Council at www.psrc.org/datapubs/pubs/index.htm or by calling them at 206.646.7532.
- **Flexibility in Highway Design**, publication number FHWA-PD-97-062, U.S. Department of Transportation, Federal Highway Administration.
- **New Community Design to the Rescue: Fulfilling Another American Dream, 2001**, National Governor's Association. This document can be found on the National Governor's Associations website under their Center for Best Practices: www.nga.org/center/1,1188,C_FAQ,00.html.
- **Main Street... When a Highway Runs Through It: A Handbook for Oregon Communities**, November 1999, Oregon Department of Transportation and the Oregon Department of Land Conservation and Development. (*Do keep in mind that what applies as governing policy or is acceptable standards in Oregon may not apply in Washington.*)
- **Making Streets That Work**, 1996, City of Seattle, www.cityofseattle.net/td/mstw.asp.
- **The Parking Handbook for Small Communities**, 1994, National Trust for Historic Preservation and the Institute for Transportation Engineers. www.mainstreet.org/index.htm.
- The State of Maryland also has a useful guidebook entitled **When Main Street is a State Highway**, 2001, Maryland Department of Transportation www.marylandroads.com.
- WSDOT's Design Office has a website that includes the **Design Manual**, ongoing updates to that manual and other information of interest to project teams. www.wsdot.wa.gov/eesc/design/policy/index.htm.
- WSDOT's T2 Center has a number of excellent publications and training courses that can be ordered or seen on-line at: www.wsdot.wa.gov/TA/T2Center/T2HP.htm. Or contact them by telephone at 360.705.7386.
- Another website with good community building publications is at: www.fhwa.dot.gov/csd/pubs.htm.

